International Appl. No.: PCT/US2004/035643 International Filing Date: October 27, 2004

Page 3

## **IN THE CLAIMS**

Please amend the claims as follows. This listing replaces all prior versions.

- 1. (Currently amended) AAn isolated nucleic acid comprising:
- a) a first nucleotide sequence encoding a pro-apoptotic protein selected from the group consisting of DR4, tBid or a biologically active fragment thereof and any combination thereof, and
- b) a second nucleotide sequence encoding a tumor-specific promoter selected from the group consisting of survivin promoter, MUC-1 promoter, htert promoter, CEA promoter, PSA promoter, alpha-fetoprotein promoter or a biologically active fragment thereof and any combination thereof, wherein the second nucleotide sequence is operably linked to and directs the expression of the first nucleotide sequence.
- 2. (Original) The nucleic acid of claim 1, further comprising a third nucleotide sequence encoding a pro-apoptotic mediator selected from the group consisting of Bax, Smac, caspase 3, TRAIL or a biologically active fragment thereof and any combination thereof.
  - 3. (Currently amended) A vector comprising the nucleic acid of elaims 1 or 2claim 1.
- 4. (Original) The vector of claim 3, wherein the vector is selected from the group consisting of AAV vector, lentivirus vector, adenovirus vector and a nonviral vector.
- 5. (Currently amended) A composition comprising the nucleic acid of elaims 1 or 2claim 1 or the vector of claims 3 or 4 in a pharmaceutically acceptable carrier.

International Appl. No.: PCT/US2004/035643

International Filing Date: October 27, 2004

Page 4

6. (Original) The composition of claim 5, further comprising a chemotherapeutic agent.

7. (Currently amended) A method of treating a-cancer in a subject, comprising administering to the subject an effective amount of the nucleic acid of claims 1 or 2, the vectors of claims 3 or 4 or the composition of claims 5 or 6 claim 1 to the subject, thereby treating the cancer in the subject.

- 8. (Original) A method of producing a viral vector comprising the nucleic acid of claim 1, comprising introducing into a cell in which viral vectors are produced:
- a) a nucleic acid comprising a nucleotide sequence encoding one or more pro-apoptotic proteins, operably linked to one or more tumor-specific promoters and a viral packaging signal;
- b) an siRNA construct and/or an antisense sequence that targets the nucleotide sequence encoding the one or more pro-apoptotic proteins of (a), either prior to, or simultaneously with introducing the nucleic acid of (a) into the cell; and
- c) nucleic acid encoding viral structural proteins and/or nonstructural proteins necessary to produce viral structural proteins that package nucleic acid into a viral vector particle, under conditions whereby the nucleic acid of (a) is packaged into a viral vector particle, thereby producing the viral vector comprising the nucleic acid of claim 1.
- 9. (Original) A method of producing a viral vector comprising the nucleic acid of claim 1, comprising introducing into a cell in which viral vectors are produced:
- a) a nucleic acid comprising a nucleotide sequence encoding one or more pro-apoptotic proteins, operably linked to one or more tumor-specific promoters and a viral packaging signal;
- b) a nucleic acid encoding bel-2 under the direction of an active promoter, either prior to, or simultaneously with introducing the nucleic acid of (a) into the cell; and

International Appl. No.: PCT/US2004/035643

International Filing Date: October 27, 2004

Page 5

c) nucleic acid encoding viral structural proteins and/or nonstructural proteins necessary to produce viral structural proteins that package nucleic acid into a viral vector particle, under conditions whereby the nucleic acid of (a) is packaged into a viral vector particle, thereby producing the viral vector comprising the nucleic acid of claim 1.

- 10. (New) A vector comprising the nucleic acid of claim 2.
- 11. (New) A composition comprising the nucleic acid of claim 2 in a pharmaceutically acceptable carrier.
  - 12. (New) The composition of claim 11, further comprising a chemotherapeutic agent.
- 13. (New) A method of treating cancer in a subject, comprising administering an effective amount of the nucleic acid of claim 2 to the subject, thereby treating the cancer in the subject.
- 14. (New) A method of treating cancer in a subject, comprising administering an effective amount of the vector of claim 3 to the subject, thereby treating the cancer in the subject.
- 15. (New) A method of treating cancer in a subject, comprising administering an effective amount of the vector of claim 10 to the subject, thereby treating the cancer in the subject.
- 16. (New) A method of producing a viral vector comprising the nucleic acid of claim 2, comprising introducing into a cell in which viral vectors are produced:

International Appl. No.: PCT/US2004/035643 International Filing Date: October 27, 2004

Page 6

a) a nucleic acid comprising a nucleotide sequence encoding one or more pro-apoptotic proteins, operably linked to one or more tumor-specific promoters and a viral packaging signal;

- b) an siRNA construct and/or an antisense sequence that targets the nucleotide sequence encoding the one or more pro-apoptotic proteins of (a), either prior to, or simultaneously with introducing the nucleic acid of (a) into the cell; and
- c) nucleic acid encoding viral structural proteins and/or nonstructural proteins necessary to produce viral structural proteins that package nucleic acid into a viral vector particle, under conditions whereby the nucleic acid of (a) is packaged into a viral vector particle, thereby producing the viral vector comprising the nucleic acid of claim 2.
- 17. (New) A method of producing a viral vector comprising the nucleic acid of claim 2, comprising introducing into a cell in which viral vectors are produced:
- a) a nucleic acid comprising a nucleotide sequence encoding one or more pro-apoptotic proteins, operably linked to one or more tumor-specific promoters and a viral packaging signal;
- b) a nucleic acid encoding bcl-2 under the direction of an active promoter, either prior to, or simultaneously with introducing the nucleic acid of (a) into the cell; and
- c) nucleic acid encoding viral structural proteins and/or nonstructural proteins necessary to produce viral structural proteins that package nucleic acid into a viral vector particle, under conditions whereby the nucleic acid of (a) is packaged into a viral vector particle, thereby producing the viral vector comprising the nucleic acid of claim 2.